

Notice of Allowability

Application No.

10/800,311

Examiner

Kuen S. Lu

Applicant(s)

HEUSERMANN ET AL.

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3 July 2007.
2. ☒ The allowed claim(s) is/are 1-37.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application
- ☒ Interview Summary (PTO-413), Paper No./Mail Date 12/3/2007.
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

M. Lu
Patent Examiner 2167

DETAILED ACTION

1. This Action is responsive to a Panel Decision from Pre-Appeal Brief Review of September 25, 2007. The Panel has held a conference and withdrawn the Final Rejection of May 16, 2007.

2. After a thorough search and examination of the present application, and in light of the following:

a terminal disclaimer filed 11/16/07 and approved 11/29/07 which disclaimed statutory term beyond that of its related patent 7,092,973;

the prior art made of record to a related application 10/328,743;

consultation with Primary Examiner Khanh Pham, who issued patent 7,092,973 and concurred with allowability of this instant application;

Examiner's Amendments amending claims 25-36; and

Examiner's update search conducted against prior art on different domains;

Claims 1-37 are allowed.

Examiner's Amendments

3. An Examiner's Amendments to the record appears below. Should the changes and/or additions be unacceptable to Applicants, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendments, it MUST be submitted no later than the payment of the issue fee. Authorization for this Examiner's amendment, listed below, was given in a telephone interview with Mr. Aaron Capron (Registration: 56,170), on December 3, 2007. A copy of the interview summary is attached.

4. Please amend claims 25-36 filed July 3, 2007 as follow:

25. (Currently Amended) A computer readable medium storing instructions that, when executed by a computer, cause the computer to perform a method ~~A computer program product with a computer program stored thereon for checking data consistency of data objects of distributed systems within a computer network, the method comprising program comprising instructions operable to cause a processor to:~~

receiving, ~~receive~~ in a second system, a copy of a first data object stored in a first system;

storing ~~store~~ the copy of the first data object within the second system;

generating ~~generate~~ a second data object from the copy of the first data object;

sending ~~send~~ the second data object and the copy of the first data object to the first system;

comparing ~~compare~~ at least one data package of the first data object with at least one data package of the copy of the first data object sent by the second system using a consistency check operation stored within the first data object, the second data object, or the copy of the first data object;

determining ~~determine~~, based on the comparison, whether to merge the at least one data package of the first data object and the at least one data package of the copy of the first data object; and

merging ~~merge~~ the data packages based on the determination.

26. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to process the first data object and the second data object according to a reaction, dependent on a consistency check operation, stored within the first data object, the second data object, or the copy of the first data object.

27. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to store, within the copy, a system identifier that identifies the first data object, an originating system of the first data object, or the first data object and the originating system of the first data object.

28. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to store object status information within the copy.

29. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to store data of the data object in a plurality of data packages.

30. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to compare the data packages sequentially.

31. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to compare the data packages hierarchically.

32. (Previously Presented) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to store a consistency check operation description and at least one reaction within a data package to be compared, wherein the data package to be compared can be a data package of the first data object, the second data object, or the copy of the first data object.

33. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to utilize the consistency check operation to compare object data included within the data packages and to characterize the data objects as consistent in the event that all object data are consistent.

34. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to utilize the consistency check operation to compare object data included within the data packages and to characterize the data objects as consistent in the event that at least some of the object data are consistent.

35. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to execute a reaction in the event that that the consistency check operation characterizes the data objects as consistent, wherein the reaction includes an action selected from the group consisting of: merging the second data object into the first data object, marking the first data object for review, marking the second data object for review, marking the first data object and the second data object for review, marking the packages of the data objects for review, and replacing the first data object with the second data object.

36. (Currently Amended) The computer readable medium ~~computer program~~ product of claim 25, ~~the program~~ comprising instructions operable to cause the computer processor to execute a reaction in the event that the consistency check operation does not characterize the data objects as consistent, wherein the reaction includes an action selected from the group consisting of: canceling the second data object, and the copy of the first data object, marking the first data object for review,

marking the second data object for review, marking the first data object and the second data object for review, marking the packages of the data objects for review, replacing the first data object with the second data object, and maintaining the first data object unchanged.

Reason for Allowable

5. In the Examiner's Office Action for non-Final Rejection of May 16, 2007, 35 U.S.C. 35 U.S.C. § 103, rejection was based on a primary reference by Erickson et al.: U.S. Patent 6,892,210, "DATABASE MANAGEMENT AND SYNCHRONIZATION ACROSS A PEER-TO-PEER NETWORK", issued May 10, 2005, hereafter "Erickson"; in view of Archibald, Jr. et al.: U.S. Patent 6,918,006, "SYSTEM AND METHOD TO COORDINATE DATA STORAGE DEVICE MANAGEMENT OPERATIONS IN A DATA STORAGE SUBSYSTEM", issued July 12, 2005, hereafter "Archibald, Jr."; and further in view of Chen et al.: U.S. Patent 6,993,522, "SYSTEM AND METHOD FOR RESOLVING CONFLICTS DETECTED DURING A SYNCHRONIZATION SESSION", issued January 31, 2006, hereafter "Chen".

In the response filed on July 3, 2007, the Applicants argued that the finality of rejection is premature due to new reference was introduced while Applicants has introduced no new subject matter and further argued that the finality should have based the same grounds of Erickson in view of Archibald, Jr. A pre-appeal conference panel further supported Applicants' arguments.

After further examining the references of Erickson, Archibald, Jr. and Chen, the references in combination does not fairly teach the confirming step of data consistency check by receiving a data packet from a source system, copying the data packet, sending the copied packet system to the source system, comparing original packet and the received copied packet to determine whether to merge the data packet originally residing on the source system and the received copied data packet, and merging the data packets based on the determination. This subject matter or a closely similar one is described in each of the independent claims 1, 13, 25 and 37.

Also after further review of the result for the searches conducted for the instant application, the above described subject matter of instant application as amended by an Examiner's Amendments of December 3, 2007, and further consideration of the above three references, the Examiner is persuaded that the prior art does not teach the above described subject matter in each of the independent claims 1, 13, 25 and 37.

An update search as described below for the claims 1, 13, 25 and 37 as of lastly amended on December 3, 2007 by an Examiner's Amendments for the subject application filed on July 3, 2007, is hereby conducted and whose search result is hereby considered.

A search for the prior arts on EAST database has been recently conducted to further extend and update the scope the searches conducted over the past on domains (EAST,

NPL-ACM, Google, NPL-IEEE). The prior arts searched and investigated in domains (EAST, NPL-ACM, Google, NPL-IEEE) do not fairly teach or suggest the teaching of the combined elements as claimed in the independent claims 1, 13, 25 and 37.

The dependent Claims in the groups (2-12), (14-24) and (26-36), respectively depending upon claims 1, 13 and 25, respectively, also distinct from the prior art.

6. Any comments considered necessary by Applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Contact Information

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kuen S. Lu whose telephone number is (571)-272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571)-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

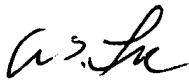
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2167

Status information for unpublished applications is available through Private PAIR only.

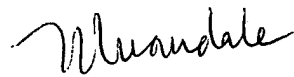
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-27-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, please call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kuen S. Lu,



Patent Examiner, Art Unit 2167

December 3, 2007



Miranda Le

Patent Examiner 2167